

I CLAIM:

1. A thermal conditioning system for a manufacturing machine, comprising: a casing for receiving therein a framework of the machine, the casing being sealed with respect to the outside environment; a plurality of ducts having air flow outlet openings at selected regions of the machine to be thermally conditioned; a conditioning device for supplying conditioned air; and a manifold coupled to the ducts, and operative for delivering the conditioned air supplied by the conditioning device to the ducts for discharge through the outlet openings.
2. The conditioning system of claim 1, in that the casing is made of a thermally insulating material.
3. The conditioning system of claim 1, in that an opening tightly sealed by a sealing bellows element is arranged at a movable element projecting from the casing.
4. The conditioning system of claim 1, in that the outlet openings comprise adjustable valves to adjust an amount of the conditioned air exiting the outlet openings.
5. The conditioning system of claim 1, in that removable panels form the casing.
6. The conditioning system of claim 3, in that the movable element projecting from the casing comprises inner top and bottom channels through which a conditioning fluid is caused to pass.
7. The conditioning system of claim 1, in that the casing comprises therein thermal sensors for detecting local temperatures inside the casing, in that the sensors are coupled to a digital control unit for the machine, and in that the outlet openings through the ducts comprise solenoid valves which are controlled to respectively open and close by signals from the digital control unit of the machine.
8. The conditioning system of claim 3, in that the machine is a machine tool, and in that the movable element is a ram.